

RESTRICTION REQUIREMENT:

Applicants at this time affirm the provisional election to pursue group I claims 1-21. Pursuant to this election group II claims 22-23 have been canceled at this time.

ANTICIPATION/OBVIOUSNESS:

Independent claim 1 (from which claims 2-14 depend) stands rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 3,683,921 to Brooks et al. and under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,287,407 to Stein et al. Continued rejection of claim 1 on these grounds is respectfully traversed and reconsideration is requested at this time.

MPEP § 2131 provides that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. The identical invention must be shown in as complete detail as contained in the claim and the elements must be arranged as required by the claim. It is respectfully submitted that these standards are not met by Brooks et al. and Stein et al. with respect to claim 1 in its current form.

Claim 1 requires that the layers of nonwoven fiber material be bonded together by the dual mechanism of layers of adhesive and the forced extension of fiber elements from one or more of said layers of nonwoven fiber material substantially across the adhesive such that mechanical entanglement is established between adjacent layers of the nonwoven fiber material. As best understood, neither Brooks et al. nor Stein et al. incorporates this dual mechanism of layered adhesive and interlayer mechanical entanglement.

Looking to the individual references, Brooks et al. appears to use impregnation of adhesive such as by spraying or coating rather than sandwiched layers of adhesive as claimed. See, Col. 7, lines 64-67. Thus, all elements of the claim are not disclosed. Stein et al. discloses a layer of material capable of glueing to base layers together but appears to avoid any substantial entanglement between the layers of nonwoven material by the use of crowned or forked needles which avoid any substantial interlayer entanglement. In particular, in the needling step of Stein et al. the crowned or forked needles are such that they preferably fill up with fibers from the

insertion side and push those fibers straight through to the reverse side. The fact that there is no intermingling of colors between different colored layers indicates that there is no substantial intermingling and entanglement between the adjacent nonwoven layers in the manner claimed.

In view of the deficiencies in the teachings of Brooks et al. and Stein et al. it is respectfully submitted that claim 1 as written as well as all claims depending therefrom now stands in condition for allowance.

OBVIOUSNESS:

Independent claim 15 and each of the claims depending therefrom stand rejected under 35 U.S.C. 103(a) as being obvious over Brooks et al. and/or obvious over Stein et al. in view of either U.S. Patent 4,211,807 to Yazawa et al. or U.S. Patent 5,635,290 to Stopper et al.. Continued rejection on these grounds is respectfully traversed and reconsideration is requested at this time.

In order to support an obviousness rejection, the references relied upon must teach or suggest all limitations of the claim. As pointed out above, Brooks et al. does not appear to teach or suggest the layered adhesive structure recited in claim 15. Accordingly, it is submitted that the obviousness rejection of claim 15 based solely on Brooks et al. should not stand. As regards the rejection of claim 15 based on the combination of Stein et al. in view of either Yazawa et al. or Stopper et al., Applicants respectfully submit that the primary reference to Stein et al. is properly viewed as teaching away from intermingling of adjacent layers of nonwoven material by advocating the avoidance of color mixing intermingling. MPEP § 2141.02 makes it clear that a prior art reference must be considered as a whole including portions that would lead away from the claimed invention. Accordingly, it is respectfully submitted that the prior art relied upon would not provided the requisite teaching, suggestion or motivation for reaching the invention as presently recited in claim 15.

In view of the fact that the cited art does not support the continued rejection of independent claim 15, it is respectfully submitted that the rejection to claim 15 and all claims depending therefrom should be withdrawn at this time.

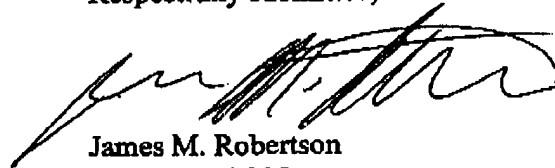
CONCLUSION:

For the reasons set forth above, it is respectfully submitted that all claims stand in condition for allowance. Prompt allowance and passage to issue is therefore requested. While Applicants have attempted to address all outstanding issues, in the event that any issue remains unresolved, the Examiner is encouraged to contact the undersigned attorney in the hope that such issue may be resolved in an expedient and satisfactory manner.

EXTENSION OF TIME:

A request for a one (1) month extension of time accompanies this amendment. To any extent as may be necessary, a request for an additional extension of time is hereby made. Authorization is hereby provided to deduct any fee necessary for such extension of time or otherwise required for the acceptance of this paper from Deposit Account 50-1424.

Respectfully submitted,



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FEL-001P

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Burns et al.
Serial Number: 09/576,720
Filed: 05/23/2000
For: Nonwoven Laminate Structure
Group Art Unit: 1771
Examiner: Pratt, Christopher

Claim Mark-Up Sheets
For
Amendment "A" Under 37 CFR 1.111

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GROUP 1700
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1. (Amended) A nonwoven composite structure comprising: a plurality of layers of nonwoven fiber material wherein said layers of nonwoven fiber material comprise a plurality of fiber elements, said layers of nonwoven fiber material being bonded together by an adhesive extending in layered sandwiched relation substantially between said layers of nonwoven fiber material, said layers of nonwoven fiber material being further bonded together by the forced extension of fiber elements from one or more of said layers of nonwoven fiber material substantially across said adhesive such that mechanical entanglement is established between adjacent layers of said nonwoven fiber material. nonwoven fiber material.

15. (Amended) A nonwoven composite structure comprising: a plurality of layers of nonwoven fiber material of needle punched construction comprising a plurality of

intermingled staple fibers, said layers of nonwoven fiber material being bonded together by one or more layers of adhesive extending in substantially sandwiching relation between said layers of nonwoven fiber material, the nonwoven composite being characterized by a thickness of not less than about 6.3 mm and being further characterized by a density of not less than about 0.1 grams per cubic centimeter said layers of nonwoven fiber material being further bonded together by the forced extension of fiber elements substantially across at least a portion of said layers of adhesive such that mechanical entanglement is established between adjacent layers of said nonwoven fiber material.